NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review – Renewal with Title III Modification

Issue Date: XXXXXXXX

Region: Fayetteville Regional Office
County: Sampson
NC Facility ID: 8200149
Inspector's Name: Jeffrey D. Cole
Date of Last Inspection: 06/11/2019
Compliance Code: 3 / Compliance -inspection

Facility Data

Applicant (Facility's Name): Black Creek Renewable Energy, LLC

Facility Address:
Black Creek Renewable Energy, LLC
7434 Roseboro Highway
Roseboro, NC 28382

SIC: 4931 / Elec & Other Services Combined
NAICS: 221119 / Other Electric Power Generation

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP: 15A NCAC 02D .0515, 02D. 516, 02D .0521, 02D .0524, 02D .0530, 02D .1100, 02D. 1111, 02D .1806, 02Q .0513, 02D .1111
NSPS: Subpart JJJJ
NESHAP: Subpart ZZZZ
PSD: Still subject, no changes in this application
PSD Avoidance: N/A
NC Toxics: Removed toxics limits per 15A NCAC 02Q. 0702(a)(27)
112(r): N/A
Other: N/A

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Eugene Walker Gas Plant Supervisor (910) 525-4132 7434 Roseboro Highway Roseboro, NC 28382	Joseph Smith General Manager (910) 525-4132 7434 Roseboro Highway Roseboro, NC 28382	Joseph Smith General Manager (910) 525-4132 7434 Roseboro Highway Roseboro, NC 28382

Application Data

Application Numbers: 8200149.17A, 8200149.15A
Date Received: 11/14/2017, 04/20/2015
Application Type: Modification, Renewal
Application Schedule: TV-Significant, TV-Renewal

Existing Permit Data

Existing Permit Number: 10148T01
Existing Permit Issue Date: 04/13/2016
Existing Permit Expiration Date: 03/31/2021

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2018	5.20	33.00	51.50	256.00	6.30	52.27	47.90 [Formaldehyde]
2017	5.20	21.00	53.90	246.00	6.40	54.70	50.30 [Formaldehyde]
2016	5.00	40.00	52.90	261.00	6.20	53.64	49.41 [Formaldehyde]
2015	5.20	34.00	3.60	301.00	7.10	4.53	2.49 [Hydrogen chloride (hydrochlori]
2014	5.50	40.00	3.80	309.00	7.30	4.79	2.63 [Hydrogen chloride (hydrochlori]
2013	4.30	34.00	3.00	240.00	5.80	3.75	2.06 [Hydrogen chloride (hydrochlori]
2012	4.69	43.92	3.11	241.00	6.33	3.95	2.21 [Hydrogen chloride (hydrochlori]

Consultant: Smith & Gardner	Contact: Cybele Brockmann	Phone: 919-828-0577	email: cybele@smithgardnerinc.com

Review Engineer: Booker Pullen **Regional Engineer:** Mitch Revels **Review Engineer's Signature:** **Date: XXX, 2019**	**Comments / Recommendations:** **Issue:** 10148T02 **Permit Issue Date:** XXXXX, 2019 **Permit Expiration Date:** XXXXX, 2024

I. Purpose of Applications:

Consultant Smith + Gardner submitted two applications on behalf of the Black Creek Renewable Energy, LLC facility. The company submitted a renewal application to the Division of Air Quality on April 20, 2015 which was considered complete on that date. The renewal application was submitted at least 9 months prior to the expiration date of Permit No. 10148T00 and therefore obtains the permit shield until the renewal permit is issued or denied. The facility also submitted a Title III (major for HAPs) application No. 8200149.17A to the DAQ on November 14, 2017 and that application was considered complete on that date. Applications 8200149.15A and 8200149.17A will be consolidated and issued as permit number 10148T02.

Two additional items were requested on the renewal application:

- Removal of the low flow utility flare (21 million Btu heat input capacity per day maximum throughput, 700 cfm, ES-CD3) from the Black Creek permit because this source is permitted on the Sampson County Disposal, LLC air permit No. 09431T05, and
- Remove the toxic air pollutant emission rates from the permit in accordance with regulation 15A NCAC 2Q .0702(a)(27).

II. Facility Description:

The Black Creek Renewable Energy, LLC facility is located in Roseboro, Sampson County, North Carolina. This facility and the Sampson County Disposal landfill facility are owned by parent company Waste Industries, USA Inc. The gas-to-energy facility is operated by Black Creek Renewable Energy, LLC and they are permitted to operate eight (8) landfill gas-fired Genset (2233 hp each spark ignition lean burn engines and 1600 kW each generators) units and a waste heat evaporator. Only six (6) Genset engines have been constructed to date. The collected landfill gas is piped from the Sampson County Disposal (SCD) Landfill area through a cooling and dewatering treatment system that is owned and operated by SCD before it is combusted in the engines. Since the landfill gas treatment system is owned by SCD, the engines at Black Creek Renewable do not have any compliance obligations for controlling NMOC emissions from the landfill [40 CFR Part 60, 60.762(b)(2)(iii)]. The electricity created in the generators is sold to Duke/Progress Energy and placed on the grid.

Included with the eight Genset engine gas-to-energy facility is a waste heat evaporator (ES-REVAP-1). This piece of equipment is a leachate evaporator that uses waste heat from the combustion of landfill gas in the Genset units (ES-GEN-1 through ES-GEN-8). The equipment does not use any additional fuels in the evaporation process. The maximum design capacity of ES-REVAP-1 is 47,000 gallons per hour.

Waste heat from some or all of the Genset units is diverted from the existing exhaust stacks into a manifold that directs the waste heat to the RE-VAP unit. Emissions from the RE-VAP unit include those that are currently permitted from the Genset units, as well as emissions from the evaporation of leachate.

Stack parameters for ES-REVAP-1 were provided and include the following:

- Stack base elevation: 147.3 feet above mean sea level
- Elevation: 201.3 feet above mean sea level [54 feet tall]
- Diameter: 4 feet
- Flow rate: 35,420 actual cubic feet per minute
- Velocity 47 feet per second
- Exhaust Temperature: 153 degrees Fahrenheit

The stacks of the existing Genset units have been modified to insert a "Y" section of piping that will direct gas to the new manifold for ES-REVAP-1. The existing Genset stack heights were extended from 30 feet to 34.5 feet to allow for this connection. During normal operation, exhaust from the Genset units flow to the RE-VAP unit;

however, isolation of individual Genset units from the system will be possible by closing the corresponding valve on the manifold. Once isolated, all exhaust from the Genset unit is emitted through the vertical stack to the atmosphere.

III. Application Chronology:

April 20, 2015	Received renewal application from the applicant.
October 9, 2017	The Division of Air Quality sent a letter to the facility stating that their most recent inventory indicated that formaldehyde emissions were greater than 10 tons per year. This made the facility a major source for HAPs and the regulations in the permit needed to be changed for the engines from an area source of HAPs to a major source of HAPs.
November 14, 2017	DAQ received the Title III application from the applicant.
April 24, 2018	DAQ received an email from the consultant on behalf of the Black Creek Renewable Energy facility requesting the removal of toxic air pollutant conditions and requirements from the air permit in accordance with 15A NCAC 2Q .0702(a)(27).
November 15, 2019	Engineering review and permit sent to regional office (RO. Supervisor, permitting coordinator, and inspector), DEQ Compliance, applicant, consultant.
XXXXXX, 2019	Draft Permit sent to applicant and consultant.
XXXXXX, 2019	Application sent to public notice and EPA review.

IV. New Equipment/Changes in Emissions and Regulatory Review:

The Black Creek Renewable Energy facility submitted a permit application to have their current air permit renewed and to have the MACT regulations changed to reflect that the eight (8) landfill gas-fired engines (Genset units) are now located at a major source of HAPs (formaldehyde greater than 10 tpy) instead of an area source of HAPs. The changes per this permit revision do not increase any emissions of criteria pollutants.

New Equipment: There are no new pieces of equipment added with this permit renewal and Title III modification.

Change in Emissions: As discussed above, there are no changes in emissions associated with this permit renewal and Title III modification, except that the formaldehyde emissions are being evaluated using emissions factors that are based on a memo (dated August 19, 2016) from Sheila Holman.

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Control Device ID No.	Control Device Description
ES-Gen-1 (MACT, NSPS, PSD)	Landfill gas-fired spark ignition genset unit (1600 kW, 2233 HP, lean burn)	None	None
ES-Gen-2 (MACT, NSPS, PSD)	Landfill gas-fired spark ignition genset unit (1600 kW, 2233 HP, lean burn)	None	None
ES-Gen-3 (MACT, NSPS, PSD)	Landfill gas-fired spark ignition genset unit (1600 kW, 2233 HP, lean burn)	None	None
ES-Gen-4 (MACT, NSPS, PSD)	Landfill gas-fired spark ignition genset unit (1600 kW, 2233 HP, lean burn)	None	None

ES-Gen-5 (MACT, NSPS, PSD)	Landfill gas-fired spark ignition genset unit (1600 kW, 2233 HP, lean burn)	None	None
ES-Gen-6 (MACT, NSPS, PSD)	Landfill gas-fired spark ignition genset unit (1600 kW, 2233 HP, lean burn)	None	None
ES-Gen-7 (MACT, NSPS, PSD)	Landfill gas-fired spark ignition genset unit (1600 kW, 2233 HP, lean burn)	None	None
ES-Gen-8 (MACT, NSPS, PSD)	Landfill gas-fired spark ignition genset unit (1600 kW, 2233 HP, lean burn)	None	None
ES-REVAP-1	Waste heat evaporator (47,000 gallons leachate per day maximum throughput)	None	None

Regulatory Review: This facility remains subject to the following regulations: 15A NCAC 02D .0515, .0516, 02D .0521, 02D .0524 (Subpart JJJJ), 02D .1111 (Subpart ZZZZ), 02D .0530 (PSD), 02D .1806, 02D .1100 and 02Q .0711.

15A NCAC 02D .0515: Particulates From Miscellaneous Industrial Processes – The facility shall continue to comply with this permit regulation for the waste heat evaporator (ES-REVAP-1). No changes are being made per this permit revision.

15A NCAC 02D .0516: Sulfur Dioxide Emissions from Combustion Sources – The facility shall continue to comply with this permit regulation. No changes are being made per this permit revision.

15A NCAC 02D .0521: Visible Emissions Control Requirement – The facility shall continue to comply with this permit regulation. No changes are being made per this permit revision.

15A NCAC 02D .0524: New Source Performance Standards Subpart JJJJ – The facility shall continue to comply with this permit regulation. No changes are being made per this permit revision.

15A NCAC 02D .0530: Prevention of Significant Deterioration – This facility became a major source for PSD due to the emissions of carbon monoxide. The Title V/PSD permit currently has BACT limits for carbon monoxide, nitrogen oxides, PM10 and PM2.5. The facility shall continue to comply with these permit regulations. No changes are being made per this permit revision.

15A NCAC 02D .1111: National Emissions Standards for Hazardous Air Pollutants Subpart ZZZZ - This permit stipulation shall be changed to reflect the emission limits, monitoring, recordkeeping, and reporting for the eight (8) landfill gas-fired spark ignition lean burn engines that are now located at a major source of HAPs (formaldehyde emissions greater than 10 tpy) instead of an area source. Compliance is expected.

15A NCAC 02D .1806: Control and Prohibition of Odorous Emissions – The facility shall continue to comply with this permit regulation. No changes are being made per this permit revision.

15A NCAC 02D .1100: Control of Toxic Air Pollutants – The facility shall continue to comply with this permit regulation, however the stipulations for this regulation will be removed in accordance with 15A NCAC 2Q .0702(a)(27).

15A NCAC 02Q .0711: Emission Rates Requiring A Permit – The facility shall continue to comply with this permit regulation, however the stipulations for this regulation will be removed in accordance with 15A NCAC 2Q .0702(a)(27).

V. Changes to Permit No. 10148T01 per this revision:

Permit Page(s)	Location	Description of Changes
Cover Letter Pages 1-2	Cover Letter	- Updated to the latest format/version of the cover letter. - Revised permit number. - Changed permit engineer's name. - Updated permit revision numbers. - Updated the type of permit being issued. - Updated the name of the Responsible official.
Permit		
1	Permit cover page	- Changed the effective date of the permit. - Changed the number of permit being replaced. - Revised the permit number being issued. - Removed the footnote concerning when the permit expires. - Revised the issue date. - Revised the application number for this modification and the complete date of the application.
3	Table of permitted emission sources	- Removed ES-CD3 (low flow utility flare) from the permit, - Added page numbers to the table of permitted sources.
4	Table of regulated pollutants	- Removed 15A NCAC 02D .1100 and 02Q .0711 from the table of regulated pollutants in accordance with 2Q .0702(a)(27).
6	2.1 A. 5	- Changed regulations to reflect RICE engines located at a major source of HAPs instead of at an area source of HAPs.
8	Table of regulated pollutants	- Corrected the Limits/Standards in the regulated pollutants section of the table of regulated pollutants for particulate emissions (was 2.3 pounds per million Btu heat input) from ES-REVAP-1. Should have been the equation for 02D .0515.
9-10	2.2 A	- Removed the low flow utility flare and the Multiple Emissions Section 2.2.
	2.2 A. 1	- Removed regulations 15A 02Q .0705 and 02D .1100, 02D .0711 in accordance with 15A NCAC 2Q .0702(a)(27).
9-18	General Conditions	- Added the most current version of the General Conditions.

VI. NSPS, MACT, PSD, and Attainment Status:

- NSPS Subpart JJJJ "40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Stationary Compression Ignition Internal Combustion Engines" applies to the eight (8) landfill gas-fired engines that make up the Genset units at this facility. No changes are being made to the permit per this revision.

- MACT Subpart ZZZZ "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines".

  The existing MACT condition in the Title V Air permit (10148T01) for this facility is based on the engines being located at an area source of hazardous air pollutants (less than 10 tpy of an individual HAP and less than 25 tpy of total facility wide cumulative HAP). The DAQ recently became aware of test data that indicates significant levels of formaldehyde emissions being created from the combustion of landfill gas in spark ignition RICE engines. Formaldehyde (CH_2O) is a Title III HAP and is not present in large quantities in landfill gas but is formed during the combustion process. Black Creek Renewable currently emits greater that 10 tpy (@ 47.90 tpy) of Formaldehyde in a 12-month period as indicated in the 2018 Emissions Inventory.

Therefore, the engines located at the Black Creek facility are:

- Considered "new" stationary RICE with a site rating greater than 500 horsepower located at a major source of HAPs that commenced construction or reconstruction on or after December 19, 2002.
- A new or reconstructed RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.
- Required to meet the initial notification reporting requirements of 40 CFR 63.6645(f).
- Required to meet the monitoring/recordkeeping/reporting requirements 40 CFR 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emissions limitations and operating limitations of this subpart. Their applicable requirements include operating in a manner which reasonably minimizes HAP emissions, monitoring and recording of daily fuel usage, maintaining daily fuel usage monitor record, and annual reporting. The permit condition has been revised to reflect the applicable requirements for RICE units located at a major source of HAPs.

  Black Creek Renewable operates these RICE units (ES-GEN-1 through ES-GEN-8) solely on landfill gas and no other fuel is introduced. Therefore, only one fuel meter is necessary to ensure that greater than or equal to 10% of the heat input is from landfill gas. This annual fuel flow rate is reported in the Air Emission Inventories to the DAQ by June 30, for the previous calendar year.

- PSD – The facility has triggered PSD and contains BACT limits for CO, NOx, PM10, PM2.5.
- PSD Increment – Sampson County is designated as being in attainment for all criteria pollutants. The County has triggered increment tracking under PSD for PM10 and NOx. This modification and renewal does not consume or expand increments for any pollutants.
- 112(r) – The facility does not store any of the listed 112(r) chemicals in amounts that exceed the threshold quantities. Therefore, the facility is not required to maintain a written Risk Management Plan (RMP).
- CAM – CAM does not apply to this facility, since it does not use a control device on the eight engines.

VII. Facility Wide Air Toxics:

The facility has requested (via email dated April 24, 2018) the removal of the toxic emission requirements per the exemption listed in 15A NCAC 2Q .0702(a)(27).

Since the engines are subject to MACT Subpart ZZZZ, North Carolina G.S. 143-215.107(a) exempts emission sources subject to MACT standards from North Carolina air toxics regulations provided their emissions do not "present an unacceptable risk to human health," in accordance with G.S. 143-215.107(b). Even though this permit renewal and the changing of the regulatory conditions to reflect that the eight (8) landfill gas-fired engines are now located at a major source of HAPs instead of an area source of HAPs, this permit action does not constitute a modification to any of the engines (physical change or change in method of operation).

The DEQ will make an assessment of the toxic air pollutant impacts for formaldehyde (CH_2O) (which have never been modeled) that are produced by the combustion of landfill gas in these engines following a guidance memo from Alan Klimek dated October 28, 1998. This memo establishes policy and procedures for responding to situations where new or revised emission information triggers changes in the estimates of emissions from a specific facility or from a number of industrial facilities when the change affects previous regulatory decisions.

In the case of Black Creek renewal, the emission factor for formaldehyde emissions from landfill gas-fired engines was revised per a memo from Ms. Sheila Holman dated August 19, 2016.

- **Emission Factor from August 19, 2016 memo**: 1.107E-03 lbs formaldehyde (CH_4)/bhp-hr (based on performance testing in North Carolina and other states across the U.S.)

Potential Emissions from the six installed Genset units:

$$\frac{1.107E-3\ lbs\ CH2O}{bhp-hp}\ x\ \frac{6\ each\ engines}{1}x\frac{2233\ hp}{1}x\frac{8760\ hr}{year}\ x\ \frac{1ton}{2000lbs}=\frac{64.96\ total\ tons\ formaldehyde}{year}$$

Since formaldehyde has an hourly TPER limit (0.04 lbs/hour) the following calculation was performed. Even though the facility only installed/operates six of the eight engines, the maximum emissions from each engine has been calculated and will be used in the modeling evaluation.

$$\frac{1.107E-3\ lbs\ CH2O}{bhp-hp}\ x\ \frac{1\ each\ engine}{1} x \frac{2233\ hp}{1} = \frac{2.47\ lbs\ formaldehyde}{hour}$$

Note: Per the 2018 inventory, the actual emissions of formaldehyde (CH_2O) were reported as 47.90 tons per year by Black Creek Renewable for the six installed units.

A dispersion modeling analysis (April 4, 2016) was previously performed by the Air Quality Analysis Branch (AQAB) which evaluated the impact of several regulated toxics from the facility. Black Creek submitted toxics modeling for four TAPs (ammonia, arsenic, benzene, and fluorides) that had potential emissions calculated to exceed the respective TPER for each pollutant. The facility included emission source modeling for the Waste Heat Evaporator and the eight permitted Genset units (ES-Gen-1 through ES-Gen-8). AERMOD using five years (2010-2014) of meteorological data from Raleigh-Durham (surface) and Greensboro (upper air) was used to evaluate impacts in both simple and elevated terrain. Receptors were placed at 25 meter intervals along the property boundary, along with a grid of receptors placed at 100 km intervals extending to a distance of 1,000 meters, and 250 meter intervals extending to a distance of 5 kilometers. The results of the modeling showed that all toxics were below their respective AALs; therefore, the modeling demonstration showed compliance for the four toxic air pollutants that were modeled.

As stated earlier in this review, the DAQ received an email from the consultant on behalf of the Black Creek Renewable Energy facility requesting the removal of toxic air pollutant conditions and requirements from the air permit in accordance with 15A NCAC 2Q .0702(a)(27). However, the DAQ is required to make an assessment of the health risk due to the increase in formaldehyde emissions from the combustion of landfill gas in the Genset units. A subsequent email (dated 10/30/2019) was sent to the consultant, who then forwarded the email to the facility, asking if they preferred that the DAQ perform the modeling or if the facility wished to model the eight permitted engines. The response from the consultant/facility was that DAQ proceed with the modeling.

Modeling was performed by Mark Yoder, Meteorologist, Air Quality Analysis Branch (AQAB). He states that the dispersion modeling for formaldehyde emissions from the Black Creek Renewable Energy LLC (BCRE) in Roseboro (Sampson County) NC adequately demonstrates compliance, on a source-by-source basis, for formaldehyde. All eight engines were modeled and the total evaporator stack (WHEV) emissions represent combined exhaust gas emissions from the eight landfill gas landfill gas-fired engine generator sets. Also modeled was each individual genset stack as a separate source group, and all eight genset stacks, minus EP-WHEV, as a source group was modeled to evaluate scenarios when the gensets were not diverted to the RE-VAP unit. An emission rate of 2.47 pounds per hour was used for each individual landfill gas generator set. An emission rate of 19.76 pounds per hour (representing eight gensets diverted to the RE-VAP unit) was used for EP-WHEV.

AERMOD (19191) using the five (5) most recent years (2014 to 2018) of preprocessed NWS meteorological data from Fayetteville (surface) and Greensboro (upper air) was used to evaluate impacts in both simple and elevated terrain. Direction specific building dimensions, determined using EPA's GEP-BPIP Prime program (04274), were used as input to the model for building wake effect determination. Receptors were placed at 25-meter intervals along the property boundary. A nested cartesian grid was established, centered on the facility, with receptors placed at 100-meter intervals extending to 1,000 meters, and at 250-meter intervals extending to a distance of 5 kilometers. Terrain elevations and hill height parameters were calculated for each receptor by the AERMAP preprocessor. There are no public right-of-ways (e.g., roads, railroad tracks, rivers, etc.) traversing the property line, therefore, no discrete receptors were required. Maximum formaldehyde impacts for all five years of meteorological data were below the AAL and the results are shown in Table 1.

Table 1- Formaldehyde Maximum Impacts Black Creek Renewable Energy – Roseboro, NC

Source Group	Averaging Period	AAL	Maximum Concentration ($\mu g/m^3$)	% AAL
Evaporator Unit (EP-WHEV)	1-hour	150	31.38	21%

Individual Genset Stacks (INDSTKS)	1-hour	150	53.69	36%

Table 2: Modeling Impact Results from the Genset units and the waste heat evaporator from this application and the previous analysis in 2016

Pollutant	**Averaging Period**	**Maximum Concentration (µg/m^3)**	**AAL (µg/m^3)**	**% of AAL**
Ammonia	1-hr	2,311.00	2700	85.59%
Arsenic	Annual	0.00	0.0021	98.57%
Benzene	Annual	0.12	0.12	99.96%
Fluorides	1-hr	37.68	250	15.07%
Fluorides	24-hr	14.56	16	91.00%
Formaldehyde	1-hr	31.38 (Evaporator Unit)	150	21.00%
Formaldehyde	1-hr	53.69 (Individual stacks)	150	36.00%

The DAQ modeled the toxic air pollutant emissions that were greater than their respective TPERS for this facility, and the modeled results are below the AALs. As such, this modification does not present an unsafe health risk because the toxic air pollutant emissions are below the AALs for all respective toxic air pollutants.

VIII. Compliance Status:

On the most recent compliance inspection performed on June 11, 2019 by Mr. Jeff D. Cole, it was stated in the report that the facility appeared to be in compliance with their current permit. The inspector noted that the low flow flare (ES-CD3) should be removed from the permit of Black Creek Renewable Energy, and that the facility had requested that the toxic air pollutant emission limits and corresponding conditions be removed from the permit in accordance with 15A NCAC 2Q .0702(a)(27). Booker T. Pullen corresponded with the consultants for this facility on April 20, 2018 and asked if they had requested removal of air toxics from the permit. As stated above in this review, an email from the consultant (with copy sent to the responsible official for Black Creek Renewable) was received on April 24, 2018 requesting the removal of all toxic related conditions from the permit.

IX. Facility Emissions Review:

Table of Facility-wide Actual Emissions as of the 2018 Inventory

SO_2	NOx	VOC	CO	PM10	Total HAP	Largest HAP
5.20 tpy	33.00 tpy	51.50 tpy	256.00 tpy	6.30 tpy	52.27 tpy	47.90 tpy formaldehyde

X. Other Considerations:

- A P.E. seal is NOT required for this application.
- A zoning consistency determination is NOT required for this renewal/Title III modification because no new sources are being added.
- This facility is not subject to the 112(r) program as it does not store any of the listed chemicals in quantities above the program thresholds.

XI. Public Notice Review:

A 30-day public notice and 45-day EPA review period is required for this permit renewal and significant modification.

The 30-day public notice period ran from _____2019 through _____2019. ___ comments were received.

The EPA 45-day review period ran from _____through _____2019. ___comments were received.

XII. Conclusions, Comments, and Recommendations:

The air permit application for the Black Creek Renewable Energy, LLC located at 7434 Roseboro Highway, Roseboro in Sampson County, North Carolina has been reviewed by the DAQ to determine compliance with all procedures and requirements. The engineering review were sent to DAQ Compliance, the Fayetteville Regional Office, the applicant and the consultant on November 19, 2019. The XXXX, ……..The Fayetteville Regional Office ___made comments on the draft permit on --------. Continued compliance with this air permit is expected.

Recommend issuance of revised air permit No. 10148T02.